R E P O R T R E S U M E S

ED 002 765 24

EFFECTS OF CHILDREN'S SOCIAL POWER AND INTELLIGENCE ON THEIR INTERPERSONAL RELATIONS.

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REPORT NUMBER CRP-099 PUB DATE SEP 57
CONTRACT OEC-SAE-6450
EDRS PRICE MF-$0.09 HC-$1.76 44P.

DESCRIPTORS- *SOCIAL ADJUSTMENT, *INTELLIGENCE DIFFERENCES, *CHILDREN, *INTERPERSONAL RELATIONSHIP, *SOCIAL DIFFERENCES, SOCIAL PROBLEMS, INTELLIGENCE LEVEL, PROBLEM SOLVING, STUDENT BEHAVIOR, PRIMARY GRADES, TEACHER EVALUATION, TEACHER RATING, PEER ACCEPTANCE, PEER RELATIONSHIP, GROUP TESTS, CLASSROOM ENVIRONMENT, MALES, FEMALES, MICHIGAN, ANN ARBOR

THE EFFECTS OF TWO DETERMINANTS, INTELLIGENCE AND DEGREE OF A PERSON'S SOCIAL POWER, WHICH AFFECT SOCIAL RELATIONS WERE EXAMINED IN THIS STUDY. THE LATTER REFERS TO THE ABILITY TO INFLUENCE THE BEHAVIOR AND BELIEFS OF OTHERS. THE OVERALL OBJECTIVE WAS TO DESCRIBE AND EXPLAIN CAUSES FOR THE TYPES AND CHARACTERISTICS USED BY CHILDREN WITH DIFFERENT DEGREES OF INTELLIGENCE. CHILDREN IN THE SECOND AND FIFTH GRADES HAVING VERY HIGH, AVERAGE, AND LOW INTELLIGENCE WERE SELECTED FOR THE STUDY. WITHIN EACH CATEGORY, THE CHILDREN WERE THEN DIVIDED INTO CLASSES OF PERSONS WHO HAD DIFFERENT DEGREES OF INFLUENCE AND EXPERTNESS ATTRIBUTED TO THEM BY PEERS AND TEACHERS. THEY WERE GIVEN A SERIES OF STANDARDIZED GROUP PROBLEM-SOLVING TASKS DURING WHICH THEIR INTERPERSONAL BEHAVIOR WAS STUDIED. THOSE WITH DIFFERENT DEGREES OF INTELLECTUAL ABILITY AND POWER WERE COMPARED WITH RESPECT TO THEIR INTERPERSONAL RELATIONS DURING THE PROBLEM-SOLVING SESSIONS AND THE BEHAVIOR USUALLY ACCORDED TO THEM IN THE CLASSROOM. THERE IS LITTLE SUPPORT IN THIS STUDY FOR THE ASSUMPTION THAT HIGHLY INTELLIGENT CHILDREN BEHAVE DIFFERENTLY IN SOCIAL SITUATIONS FROM THOSE WITH LOW INTELLIGENCE WHEN THE DEGREE OF THEIR SOCIAL POWER IS HELD CONSTANT. INTELLIGENCE BY ITSELF IS NOT AN IMPORTANT DETERMINANT OF SOCIAL RELATIONS. (JH)

ED002755

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EFFECTS OF CHILDREN'S SOCIAL POWER AND INTELLIGENCE ON THEIR INTERPERSONAL RELATIONS

Final Report to the U.S. Office of Education

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September 1957

This report has been prepared to describe research conducted by the Research Center for Group Dynamics under Contract No. SAE - 6450 with the Office of Education, U.S. Department of Health, Education and Welfare. A revised and briefer version of the report will be published in technical journals in the future.

In recent years, as the objectives of education have broadened beyond an emphasis on subject matter to a concern with the "whole" child, there has been an accompanying increase of interest in children's social behavior. It is a legitimate purpose of American education today, many feel, to teach children how to work together and to be comfortable in group settings.

In order to implement such objectives it is necessary to understand how enduring characteristics of persons, and characteristics they acquire as a result of their memberships in groups, affect their social relations. In this study the effects of two such determinants are examined. The two are intelligence and the degree of a person's social power. Social power refers to the ability to influence the behavior or beliefs of others.

Educational practitioners have revealed their interests in these two properties of persons, often in contradictory ways, in comments such as the following. They say:

Concerning brighter children. These young people may have trouble in school because they become bored with their slim intellectual diet and seek unacceptable outlets for their interests. They are seen by their classmates as "different" and therefore win little acceptance or influence in their groups. Or, they tend to be popular because they can do many things well. Their brightness makes them sensitive to other people and thus they are usually highly skilled in social relations. Yet, they may be viewed as having too many social graces and rejected on that basis. They often prefer to withdraw into a corner with books for companions.

Concerning duller children. Dull children must struggle hard to keep up with others in school. The effort is often seen as not worthwhile, or culminates in failure, and as a result they get into difficulty by seeking ways of relieving their tensions. Intellectual ability is seldom a source of prestige in a school so these persons are not rejected on that basis, indeed they are as well accepted as any. Children who are less bright develop unusual social skill to make up for their lack of intelligence in interacting with others. They have little self-respect so they tend to withdraw into daydreaming. They are often at odds with authorities in a school and this makes them popular heroes.

Concerning children with little influence. These children are overlooked by their peers, thus they attempt to win attention from others. Teachers ignore such children since no one else pays much attention to them. They tend to have few friends since being liked and being influential in a group go hand in hand. They are dominant and aggressive persons who repel their classmates and teachers.

Comments on this order are seldom made about a child who is well accepted in a classroom. Apparently few are concerned about him.

The nature of these varied assertions makes it clear that there are many different beliefs concerning the effects of intelligence and social power on the social relations of children. One purpose of this investigation is to obtain objective evidence relevant to these opinions.

Toward this general purpose, measures were made of the intelligence and social power of all children in a number of classrooms. A selected sample of these persons were then put in "standardized" small groups

where their behavior was observed. The results of these observations were studied to see how those who brought different degrees of power and intelligence into the groups differed in their behavior. Answers to four questions were sought: (a) How does a child with high intelligence who is highly influential in his class differ in social behavior from one who is also bright but has little influence with his classmates? (b) How does the behavior of a less intelligent child with much social power differ from that of a less intelligent child with little power? (c) How does the social behavior of a child who has much social power and is bright differ from that of the child who has much social power but is not so bright? (d) How does the social behavior of a pupil with little social power who is intellectually able differ from that shown by a pupil who is low in power and less capable? The specific objectives were to find answers for these questions.

The choosing of these questions was guided by several assumptions. It was assumed, first, that in a social setting, intelligence represents the possession of relevant resources or the ability to invent them. A resource is a property or state which is desired by persons. In this case the resources were in the form of ideas or proposals which may be of use to the group in their endeavors. Second, it was assumed that the resources offered to a group may be highly utilized by them, to state one extreme, or mostly ignored at the other extreme. A child whose ideas are usually accepted by a group has high social power and one whose ideas are usually ignored has low social power. Third, it was assumed that persons have a need to increase their social power among their peers and; finally, getting others to use these resources is one way they can increase their power.

In the light of these assumptions certain answers were anticipated for the above questions. A person with high resources (intelligence) who has little social power in his group will behave in ways intended to win acceptance of his ideas by others. He will seek to win acceptance of his ideas by displaying friendly, understanding, not-too-forceful behavior toward the others. The highly intelligent person who is high in social power, will be less likely to be concerned with social graces and will offer ideas for the group to take or leave as they wish; knowing perhaps that in the past others have usually taken his suggestions. The child with low intelligence, but who nevertheless has social power, will exhibit behavior which is highly acceptable to others. He has few resources to provide so what he does have must be offered in a fashion which will make them acceptable to others. The pupil with low resources and little acceptance will be inept in social relations and will withdraw from social interaction.

Assuming that a child's degree of intelligence and social power determine his social behavior in a group setting, it is then likely that the degree of a person's intelligence and social power also affect the opinions others have of him. Therefore, the qualities that children assign to persons who have various degrees of these two properties were also examined in this study.

Finally, it is of interest to learn how teachers perceive children with different degrees of intelligence and power. What aspects of the teachers' opinions, based on day-by-day experience with these children, support or contradict the behavior shown in the standardized group situations? Were the perceptions of teachers such that they favor one group over the other? Were teachers able to differentiate between the

behavior of one type of person and that shown by another?

Method

This study has used data which were originally collected for a different but related purpose.[1] Under the supervision of Dr. Ronald Lippitt at the Research Center for Group Dynamics, measures were obtained from all children in 16 second grade classrooms and 16 fifth grade rooms in a medium-sized city. Children were then selected in that study for use in a field experiment which was concerned with changing the social positions of those who were not well accepted by their peers. In order to have a baseline so that the amount of change in a participant's social position could be determined, the original measures were concerned with a variety of ratings by peers and teachers, and with the behavior of each child in a standard social situation prior to the experiment.

The data employed in the present investigation are from these pre-experimental measures. For the purposes of this research it was assumed that the amount of intelligence and social power possessed by pupils would have regular and systematic relationships with the ratings given by peers and teachers, and with the behaviors observed in the small groups.

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1. Supported by grant-in-aid (M-919) from the National Institute of Mental Health, National Institutes of Health, U. S. Public Health Service. Findings from the study are as yet unpublished.

Out of the original population of 638 children a number were chosen who had degrees of power and intelligence in different combinations. Pupils high in intelligence were those in the upper 33 per cent of their classroom groups, and those low in intelligence were in the lower 33 per cent. Children high in power were those in the upper 50 per cent, and those low in power were in the lower 50 per cent of their class groups. The various combinations and the number of subjects in each type follow.

Combinations of Characteristics	N
High in intelligence, low in power	80
High in intelligence, high in power	131
Low in intelligence, low in power	135
Low in intelligence, high in power	75

The sample included 226 boys and 192 girls. There were 230 second grade children, and 188 fifth graders among the subjects studied.

The type of data avialable for each child and the source of each are described.

Intelligence

Intelligence scores were obtained from school records. They were based on the results of the Kuhlman-Anderson test, administered in a group form.

Ratings by Peers

Every class member rated every child on four characteristics. They received a printed sheet which contained a picture of each person in their class. They were taught to use a four-point rating scale in

responding to the following questions:

1. Who can most often get you to do things for him? This is the measure of social power used in this study.

2. Whom do you like in this class and whom don't you like? (liking)

3. Who in this class is good at doing things you do at school? (expertness)

4. Who can make the kids in this room most afraid of him? (coerciveness)

The last three attributes, attractiveness, expertness and coerciveness are considered to be separate bases for the amount of power attributed to a child by his peers.

Social Behavior

Four tasks were presented to the children, each of which required a decision by a group, based upon thoughtful discussion. In one problem, for example, they built a large tinker-toy and in another they arrived at a decision as to how many beans were in a bottle. The members of a class were divided into four smaller groups and each group was sent to a corner of the room. A trained observer was stationed in each corner who recorded on a pre-coded observation schedule the quantity and quality of behavior intiated and received by each child.[2] At the end of each task new groups were formed for the next discussion, thus providing maximum opportunity for each child to interact with every other child in the room.

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2. Data provided by these observations was examined for reliability. Information concerning the reliability of them will be available in publications concerning the project from which these data were borrowed.

The observed behavior was coded into the following categories:

1. Total influence attempts - efforts to influence others regardless of the manner employed;

2. Frequency of successful influence attempts - efforts in which compliance was obtained from others;

3. Frequency of unsuccessful influence attempts - efforts in which compliance was not obtained from others;

4. Frequency of directed influence attempts - comments made in an ordering or directing manner, implying autonomy for the actor;

5. Frequency of suggestions - comments indicating weak proposals to or requests of others;

6. Total valuing of others - behavior indicating recognition of either high or low resourcefulness of another person in an area of knowledge or skill;

7. Frequency of positively valuing others' behavior - comments indicating recognition of high value in others' behavior;

8. Frequency of negatively valuing others' behavior - comments indicating recognition of low value in others' behavior;

9. Total affect-laden behavior - behavior in which overt friendliness or unfriendliness is observed which is not a direct attempt to influence another;

10. Frequency of forceful initiations - acts of aggression which are either inflicted or threatened;

11. Mean weighted directness in style - ratio of frequency of indirect to direct forms of behavior toward others.

Perceptions by Teachers

Every child was rated by his teacher on seven characteristics descriptive of social behavior of children in the schoolroom during a regular day. They were asked to indicate on a five-point scale the extent to which each child showed the behavior under consideration (from "hardly ever" to "most often"). The qualities rated follow.

1. Frequency of attempts to influence others
2. Amount of success in influencing others
3. Amount of friendliness shown in social interaction
4. Degree to which pupil is dependent on teacher
5. Degree to which pupil is dependent on peers
6. Amount of self-centeredness (versus interest in others)
7. Directness in child's manner

Analysis of Data

The plan of the analysis was to determine how variations in power or intelligence were related to the results from measures provided by peers, teachers, and group observers. The degree of one of the two major variables was held constant while the "effect" of variations in the other was examined. For example, the nature of the social behavior shown by children high in power was compared with that revealed by those low in power, where all were high in intelligence. The *t* test was used for statistical treatment of the results.

Additional Measurements and Analyses

Results from certain measurements of these children are not contained in this report. These are briefly described.

1. Achievement scores. The results from achievement tests were available for all participants in this study. Complete analyses were made in which achievement scores were used in place of degrees of intelligence. The results were similar to those where intelligence is a major variable. They add no new information and are therefore omitted.

2. Success as influencer in group discussions. Participants were selected who were among the 33 per cent most successful in having their ideas accepted by the groups. The behavior of these children was compared with that shown by participants who were among the 33 per cent least successful. The results provided little additional information beyond those reported in following pages. They demonstrate clearly that more successful children were more active in the group discussions.

3. Age. The results on all dimensions for second graders were compared with those provided by fifth graders. No consistent evidence of differences in ratings by peers or teachers, or in social behavior was found to be associated with differences in age.

Results

Results are presented for (a) ratings of subjects by peers, (b) observed behavior of subjects in the small groups, and (c) perceptions of subjects by teachers, within each of the combinations of power and intelligence earlier described. Differences in results provided by boys and girls are also discussed.

For the sake of brevity in the description of findings, the data in tables and the descriptions of quantities in the text are usually limited to statistically significant results. The omission of results concerning

a specific category among a particular type of data means that no significant findings were obtained for it.

At the outset it is useful to note that a child's social power is not likely to be correlated with his degree of intelligence. The correlation, for a sub-sample of children from the total population of subjects was close to zero. The low relationship between these two qualities of persons indicates that they may vary quite independently.

The Effects of Social Power

We inquire first about the nature of social relations for children who had different degrees of social power where the amount of their intelligence was held constant.

The Highly Intelligent Children

(a) Ratings by peers. The characteristics assigned to their classmates by peers, as already mentioned, may be considered indicative of various sources of social power. In Table 1 these data are presented.

It is evident that intelligent children with high social power were better liked and seen as more able in schoolwork than those low in power. Thus, the influence of children with higher social power stemmed perhaps from their attractiveness and their expertness in the school setting.

Boys and girls were alike in that these two characteristics were attributed to persons with greater power. In addition, boys with higher social power were viewed as more threatening than boys with less power. These results are shown in Table 2.

Table 1

Characteristics Attributed by Highly Intelligent Children with Different Degrees of Social Power

	Social Power		
	High Mn.	Low Mn.	p of diff.*
Attractive	21.08	15.09	.01
Able in School work	21.61	15.12	.01
Threatening	29.30	28.15	.30

*The values for p in this table, and in Tables 4 and 7, were obtained by combining the t scores for the sub-populations (boys and girls) according to a procedure proposed in Gordon, M., Loveland, E., & Cureton, E. An extended table of chi-square for two degrees of freedom, for use in combining probabilities from independent samples. Psychometrika, 1952, 17, 143-159.

Table 2

Characteristics Attributed to Highly Intelligent Boys and Girls by Peers

	Boys					Girls				
	Social Power					Social Power				
	High Mn.	Low Mn.	t	df.	p	High Mn.	Low Mn.	t	df.	p
Attractive	21.26	15.19	6.26	94	.0005	20.93	15.02	8.09	113	.0005
Able in School Work	21.86	14.32	6.18	94	.0005	21.38	15.76	2.68	113	.005
Threatening	30.21	27.56	3.49	94	.0005	28.85	28.61	.310	113	.25

(b) Social behavior. The observed behavior of children while they met in small discussion groups is next described.

Highly intelligent pupils who were high in power were not significantly different in any category of behavior from children who were low in power. There were nearly significant ($p = .10$) tendencies for those higher in power, compared to those lower in power, to make more suggestions and to be more direct in their approaches to others.

Variations of power for intelligent boys were not related to a significant degree to any forms of observed behavior. The same was true for girls.

It is evident, however, that boys were considerably more active in their groups than were girls. This can be seen in Table 3 where the behavior of boys and girls is directly compared. Consider, first, the behavior of boys compared to that of girls, when members of both sexes were high in intelligence but low in power. It is clear that boys made many more attempts to influence others, were more often successful in doing so, were more often unsuccessful as well, made more frequent suggestions, and were more forceful (i.e., threatening) in their style.

Note, next, how the sexes compared in their behavior where all were high in both intelligence and power. Here the pattern of behavior is little different from that just described. It is noteworthy that high-high boys, compared to high-high girls, were more direct in their comments, more forceful, and used more affect-laden types of behavior. Boys, then, in contrast to girls, were more likely to be active in their groups regardless of their social power, and were likely to be more forceful when high in both power and intelligence.

Table 3

Effects of Social Power on Behavior of Highly Intelligent Boys Versus Girls

	Social Power					Social Power				
	Low Boys Mn.	Low Girls Mn.	t	df.	p	High Boys Mn.	High Girls Mn.	t	df.	p
Total influence attempts	21.63	13.57	2.30	78	.025	25.55	16.69	3.08	129	.005
Freq. successful influence att.	11.97	7.21	1.80	78	.05	15.76	9.79	2.62	129	.005
Freq. unsuccessful influence att.	9.66	6.36	2.39	78	.01	9.78	6.90	1.79	129	.05
Freq. suggestions	6.87	10.04	3.13	78	.005	19.95	13.80	2.75	129	.005
Total valuing of others' behavior	2.16	1.67	.97	78	.10	2.29	2.09	.48	129	.80
Freq. directed infl. attempts	4.63	3.14	.28	78	-	5.17	2.61	2.64	129	.005
Freq. forceful initiations	2.97	1.50	1.89	78	.04	2.79	1.54	2.36	129	.01
Total affect-laden remarks	1.95	2.02	.15	78	-	2.46	1.63	3.92	129	.0005
Mn. weighted directedness in behav.	21.15	20.95	.31	78	-	22.64	21.25	1.50	129	.10

(c) Perceptions by teachers. The teadhers made clear distinctions among the highly intelligent children who differed in power. It is shown in Table 4 that pupils with high power were described by teachers as more successful in their efforts to influence classmates, more friendly, less dependent on teachers, and less self-centered than pupils who were low in power. Although children who differed in power had not been observed to differ greatly in behavior in the group discussions, teachers attributed distinct differences to children who differed in power.

The ways in which children with high power were seen by teachers as different from those with low power were essentially the same for both sexes. This can be seen in Tables 5 and 6. The only additional distinctions teachers made in describing the sexes were that boys with higher power, compared to ones with lower power, were seen as less dependent on their peers and less direct in their approaches to others. These characteristics were not attributed to girls with different degrees of power.

The Less Intelligent Children

(a) Ratings by peers. Children with greater social power, among those with low intelligence, were better liked and were seen as more able in schoolwork than children with lower power. This is shown in Table 7.

Table 4

Characteristics Teachers Attribute to Highly Intelligent Children with Different Degrees of Social Power

	Social Power		
	High Mn.	Low Mn.	p of diff.
Amt. success as influencer	3.94	3.21	.01
Friendliness	3.78	3.22	.01
Depends on teacher	3.80	4.49	.05
Self-Centered	3.76	4.47	.01

Table 5

Characteristics Teachers Attribute to Highly Intelligent Boys with Different Degrees of Social Power

	Social Power				
	High Mn.	Low Mn.	t	df.	p
Freq. Influence Attempts	4.05	3.70	1.50	94	.10
Amt. Success as Influencer	4.10	3.24	3.69	94	.0005
Friendliness	3.95	3.41	2.43	94	.01
Depends on teacher	3.57	4.62	3.84	94	.005
Depends on peers	3.68	4.45	3.00	94	.005
Self-Centeredness	3.58	4.26	2.93	94	.005
Degree of directness	3.68	4.44	3.00	94	.005

Table 6

Characteristics Teachers Attribute to Highly Intelligent Girls with Different Degrees of Social Power

	Social Power				
	High Mn.	Low Mn.	t	df.	p
Amt. success as influencer	3.78	3.19	3.39	113	.005
Friendliness	3.62	3.07	2.75	113	.005
Depends on teacher	4.00	4.38	1.80	113	.05
Self-Centeredness	3.93	4.63	3.16	113	.005

Table 7

Characteristics Attributed by Peers to Less Intelligent Children with Different Degrees of Social Power

	Social Power		
	High Mn.	Low Mn.	p of diff.*
Attractive	22.82	16.08	.01
Able in school work	24.81	17.39	.01
Threatening	29.39	28.26	.20

*See footnote to Table 1, page 12.

Table 8

Characteristics Attributed to Less Intelligent Boys and Girls by Peers

	Boys					Girls				
	Social Power					Social Power				
	High Mn.	Low Mn.	t	df.	p	High Mn.	Low Mn.	t	df.	p
Attractive	22.13	15.87	6.59	128	.005	23.96	16.46	11.69	75	.005
Able in school work	24.40	17.28	1.15	128	.10	25.47	17.57	16.28	75	.005
Threatening	29.10	27.82	1.86	128	.05	29.84	29.04	.90	75	.10

These same qualities, as shown in Table 8, were attributed to girls. Boys with greater power were seen as more threatening and were well liked but were not accorded expertness. Apparently being liked is an accompaniment of power for both sexes when low in intelligence, but girls and boys differ in that the former may be granted power because of ability in school work whereas boys are attributed power because they are seen as threatening.

(b) Social behavior. Among the less intelligent children, those with high social power were little different in their observed group-behavior from those low in power. The more power they had, the more they were successful in their attempts to influence others (Mns. of 12.04 for high power and 7.07 for low power, p of diff. = .01), and the more they made suggestions (Mns. of 16.85 and 11.35, p of diff. = .05). These were the only significant differences. There was some tendency (p = .10) for children with more power to make more positive remarks in evaluating the behavior of other members.

A number of relationships were found between social power and behavior among less intelligent boys. Those with more power, compared to ones with less power, (See Table 9) were more active in their efforts to influence others, were both more successful and unsuccessful in doing so, were more direct as well as indirect in their approaches to others, and made many more comments in which they expressed their evaluations of others' behavior. This syndrome of behaviors suggests an active give-and-take in the style of the boys with greater power.

Among girls, those with more power were more often successful in their efforts at influencing others (Mns. 8.81 and 5.61, p of diff. = .01) and were more positive in their remarks about others' behavior (Mns. 1.28 and .58, p of diff. = .01). Boys compared to girls seemed to be considerably more involved in their group's activities.

Table 9

Effects of Social Power on Less Intelligent Boys' Behavior

	Social Power High Mn.	Social Power Low Mn.	t	df.	p
Total influence attempts	24.34	16.00	3.18	128	.005
Freq. successful influence attempts	13.87	7.96	3.16	128	.005
Freq. unsuccessful influence attempts	10.48	8.04	1.98	128	.05
Freq. directed influence attempts	5.33	3.46	2.10	128	.025
Freq. suggestions	18.90	12.30	3.13	128	.005
Total valuing of others' behavior	2.48	1.73	2.03	128	.025

A more direct comparison of the social behavior shown by less intelligent boys and girls was made. (Table 10). Boys with high power, compared to girls with high power, were considerably more active in their groups. Boys made more comments, were both more successful and unsuccessful in influencing others, and reacted to the contributions of others more than girls did. Boys with low social power were very little different from girls with low social power although they tended to be more direct in their approach to others rather than indirect.

(c) Perceptions by teachers. Behavior in the schoolroom as described by teachers was somewhat different among (less intelligent) children who differed in social power. Those with greater power were viewed as more successful in influencing classmates (Mns. of 4.60 and 3.59, p of diff. = .01), and as more friendly (Mns. 4.28 and 3.43, p of diff. = .01). There was also a tendency (p = .10) for teachers to view children with greater power as less self-centered.

Distinctions between those with high power and those with low power were more often made by teachers in respect to boys than in regard to girls. The ways in which teachers made a distinction between boys with high power and boys with low power are shown in Table 11. It is notable that teachers perceived those with higher power as more active, successful in influencing others, independent, and friendly than boys with lower power. They saw girls with more power, compared to those with less, as more successful in influencing others (Mns. 4.82 and 3.77, p of diff. = .005) and friendly (Mns. 4.30 and 3.46, p of diff. = .005).

Table 10

Effects of Social Power on Behavior of Less Intelligent Boys versus Girls

	Social Power High Boys Mn.	Social Power High Girls Mn.	t	df.	p	Social Power Low Boys Mn.	Social Power Low Girls Mn.	t	df.	p
Total Influence Attempts	24.34	15.96	2.44	70	.01	16.00	13.49	1.09	133	.10
Freq. successful Infl. attempts	13.87	8.81	1.99	70	.05	7.96	5.61	1.59	133	.10
Freq. unsuccessful Infl. attempts	10.48	7.15	1.90	70	.05	8.04	7.88	.12	133	-
Freq. suggestions	8.89	13.23	2.07	70	.005	12.31	9.75	.84	133	.20
Freq. positively valuing others' behavior	1.19	.61	2.04	70	.025	.89	.58	1.63	133	.05
Total valuing others' behavior	2.48	1.54	1.96	70	.05	1.76	1.41	.99	133	.20
Mn. weighted directedness	21.98	19.70	.30	70	-	21.95	20.09	2.86	133	.005
Freq. forceful influences	3.24	2.00	1.40	70	.15	3.13	2.20	1.50	133	.10

Table 11

Characteristics Teachers Attribute to Less Intelligent Boys with Different Degrees of Social Power

	Social Power				
	High Mn.	Low Mn.	t	d.f.	p
Freq. influence attempts	4.10	3.52	2.40	128	.01
Amt. success as influencer	4.46	3.50	4.38	128	.005
Friendliness	4.27	3.41	3.63	128	.005
Depends on teacher	3.76	4.32	3.08	128	.005
Depends on peers	3.56	4.04	2.23	128	.025
Degree of directness	3.56	4.04	2.23	128	.025

The Effects of Intelligence

The discussion now turns to a consideration of the differences in social behavior shown by children who were high in intelligence compared to those who were low in this characteristic while the amount of their social power was held constant.

The Child with High Social Power

(a) Ratings by peers. The highly intelligent pupil was characterized as expert in schoolwork more than the one who was low in intelligence (Mns. 17.38 and 15.12, p of diff. = .01).

These results were the same for both boys and girls, with the addition that more intelligent girls were better liked than less intelligent ones (Mns. 23.96 and 20.93, p of diff. = .005).

(b) Social behavior. The observed behavior of more intelligent children, among those with high social power, was in no way different to a significant degree from that shown by children with less intelligence. This was true for both boys and girls.

(c) Perceptions by teachers. Teachers made no distinctions to a significant degree between children high in intelligence and those low in intelligence, among those with high social power. This was true in respect to their ratings of boys, but in their ratings of girls those with high intelligence were seen as different from girls with low intelligence in several respects: more intelligent girls were viewed as making more attempts to influence classmates (Mns. 4.26 and 3.80, p of diff. = .02) and as more successful in doing so (Mns. 3.77 and 3.19, p of diff. = .005). There were tendencies, significant at about the ten per cent level of probability, for teachers to see intelligent girls as more friendly, less dependent on others, and less self-centered.

The Children with Little Social Power

(a) Ratings by peers. The children with high intelligence, among those with low social power, were viewed by classmates as being more able in schoolwork than those with low intelligence (Mns. 24.80 and 21.61, p of diff. = .01).

This result was the same for the members of both sexes, except that girls with high intelligence were better liked than those with low intelligence (Mns. 23.96 and 20.93, p of diff. = .005).

(b) Social behavior. The behavior of all children with high intelligence was not significantly different from that shown by children with low intelligence, where all were low in social power.

The degree of intelligence possessed by boys (low in social power) was associated with several differences in behavior. These are shown in Table 12. Boys with more intelligence, compared to those with less, made more attempts to influence others, were more successful in doing so, and more often made approving remarks about others' behavior in the group.

The behavior of girls was not significantly related to different degrees of intelligence.

(c) Perceptions by teachers. Teachers did not perceive highly intelligent pupils as behaving any differently in the classrooms from less intelligent ones, when all were low in social power.

In ratings of boys with different degrees of intelligence this lack of distinction was consistent.

Table 12

Effects of Intelligence on Behavior of Boys with Low Social Power

	Intelligence				
	High Mn.	Low Mn.	t	d.f.	p
Total influence attempts	21.63	16.00	2.02	120	.025
Freq. successful influence attempts	11.97	7.96	2.06	120	.025
Freq. suggestions	16.86	12.30	2.04	120	.025
Freq. positively valuing others' behavior	1.37	.89	2.58	120	.01

In their ratings of girls, however, teachers viewed highly intelligent ones, compared to less intelligent girls, as making more frequent attempts to influence others in the class (Mns. 4.29 and 3.76, p of diff. = .02), more successful in these efforts (Mns. 4.82 and 3.78, p of diff. = .005), and as more friendly (Mns. 4.29 and 3.62, p of diff. = .005). Teachers also tended to see highly intelligent girls as less self-centered (p = .10).

Children Who Were High in Both Intelligence and Power Compared to Ones Low in Both Respect

An understanding of the interaction between power and intelligence may be made more complete by considering briefly the social relations of high-highs compared to low-lows.

(a) Ratings by peers. Children high in both intelligence and power were liked more, seen as more expert, and viewed as more threatening than those low in both characteristics.

(b) Social behavior. High-highs were significantly more successful in their attempts to influence others, made more suggestions, and made more positive evaluations of others' behaviors than did low-lows. In Table 3 we noted differences between boys and girls in these respects.

(c) Perceptions by teachers. Teachers perceived children high in both intelligence and power, compared to those low in both, as more frequently attempting to influence others, successful, friendly, less dependent on teachers and peers, and less self-centered.

The results from persons high in intelligence and low in power were compared with those obtained from children low in intelligence and high in power. Findings from such an analysis cannot be easily interpreted since both determinants are varying at once. The comparison was made, however, to see if intelligence and power, when opposed in degree, tend to cancel the effects found elsewhere to be associated with one or the other. Several findings are noteworthy.

Peers attributed more expertness to the children with greater power, and liked them better, regardless of their intelligence.

Low-highs did not differ to a significant degree from the high-lows on any of the various categories of observed behavior. Ratings by teachers were not significantly different in any respect for the one group of children compared to the other.

The fact that low-highs and high-lows were not different in the social behavior seen in discussion groups nor as seen by teachers suggests that opposing degrees of power and intelligence may serve to cancel the effects of each other.

Summary and Discussion

The major findings concerning the ways in which indicators of social relations were associated with power and intelligence are summarized separately for the total population and for each of the sexes.

Total Population

Social Power

The more power a child had the more he was liked by his peers and the more he was seen as "expert" in the things you do at school."

The children with high social power behaved only a little differently from the ones with low social power, among those high in intelligence. But the children with greater power were more successful and less direct in their interaction with others, among those low in intelligence.

Teachers described children with greater social power, compared to those with less power, as more successful influencers, more friendly, and less self-centered, regardless of their intelligence. Pupils with greater power were seen by teachers as less dependent, among those high in intelligence. Ones with greater power were perceived by teachers as more often attempting to influence classmates among those low in intelligence.

Intelligence

Highly intelligent children were seen by peers as more expert in schoolwork.

Highly intelligent children behaved no differently in the groups from less intelligent children.

Teachers did not perceive highly intelligent pupils as behaving any differently in their classes than less intelligent pupils.

Boys

Social Power

Boys who were high in social power were better liked and seen as more threatening by their classmates than those low in power. Boys with

high social power were seen as more expert than those with low social power among boys high in intelligence, but this distinction was not made for boys low in intelligence.

Boys with high power behaved no differently from ones with low power among those high in intelligence. Those with more power were more active and involved in their groups among those low in intelligence.

Boys were considerably more involved in the give-and-take of the group than were girls. Boys high in both power and intelligence were more direct, forceful, and emotional in their remarks than girls high in both power and intelligence. Boys low in both intelligence and power were little different from girls low in both respects, except for more directness in their manner.

Boys with greater social power were perceived by teachers, compared to their perceptions of those with less power, as making more attempts to influence others, more successful in doing so, more friendly, less dependent on teachers and peers, and less direct in manner regardless of their intelligence. Boys with greater power were seen as less self-centered among those high in intelligence.

Intelligence

Highly intelligent boys were viewed by their peers as more expert in schoolwork.

Highly intelligent boys behaved no differently from less intelligent boys among those high in power. Highly intelligent boys were more active, successful and supportive of others than less intelligent boys, among those low in social power.

Teachers described boys high in intelligence no differently from those low in intelligence.

Girls

Social Power

Girls with greater social power were better liked by their peers and seen as more expert.

Girls with high power behaved no differently from those with low power, among those high in intelligence. Those with higher power were more successful in influencing members of the discussion-group and more often praised other members than those low in power, among less intelligent girls.

Teachers described girls with greater social power as more successful and friendly in their relations with classmates. Girls with greater power were viewed by teachers as less dependent and more altruistic in their classroom behavior than those with less power, among girls with higher intelligence.

Intelligence

Highly intelligent girls were better liked and seen as more expert regardless of their degree of power.

Highly intelligent girls behaved no differently in their groups from less intelligent ones.

Teachers perceived more intelligent girls as making more attempts to influence others and as more successful in doing so than less intelligent girls, regardless of their degree of social power.

Discussion of Results

We now discuss the consequences of owning a given degree of power or intelligence, in so far as apparent effects upon social relations are concerned.

Social Power

The children with different degrees of social power had been so designated by their classmates. Did those who were attributed greater amounts of power appear to have different relations with their peers than those with less of this quality? Did children with more power act as though they had greater power? We consider data relevant to these questions for the total population and then for members of each of the sexes.

In general, children with greater power were better liked and seen as more expert by their classmates. These findings mean, we believe, that the children who had been identified as most influential had won their high power because they were well liked, a finding which has frequently been noted in other studies. Furthermore, they had influence in their classes because the ideas and suggestions they offered were seen by classmates as wise or correct and children accepted them because they had a desire to be correct. It is noteworthy that the ability "to make others afraid" was not consistently granted to children with greater influence. In sum, it appears that children with more power were seen by classmates as having qualities which might reasonably have won power for them in their classes.

The impact of a child's degree of power is most clearly identifiable in the amount of acceptance for his ideas by other children. Let us see if children with greater power were more successful.

It is evident that the child with more social power was no more successful than the one with less power in influencing the decisions of the small groups, among the highly intelligent children. It appears, then, that more or less power for an intelligent child does not affect his success in influencing others.

Why should this be? One might very well expect that the more intelligent child with greater power would be most successful as an influencer and otherwise quite different in his behavior from the highly intelligent but less influential person. Our best guess is that the intelligent child with high power tended to be forceful and dominating in the discussion groups and that this behavior was resisted by members. In comparisons of the behavior of highly successful and highly unsuccessful children, omitted from this report, it was noted that unsuccessful persons among those high in both power and intelligence were significantly more often users of force in their participation in the groups. There is also the fact that high-highs tended to remain aloof from their groups (they were clearly outtalked by less intelligent children) and this perhaps weakened their typical effect upon their groups' decisions.

An explanation of the high-high's frequent use of arbitrary behavior may be that they are used-to being influential in relations with others, even obeyed, and saw no need for winning goodwill from others in order to facilitate acceptance of their ideas. This explanation more aptly fits boys than it does girls, as we shall see. Indeed, the behavior of boys so greatly contrasted with that of girls that results from the total population are not as striking as they might be since the findings from the separate sexes tend to cancel one another.

Among less intelligent children, ones with greater power were more successful than those with less power in urging their ideas on others. The greater success in having their ideas accepted indicates, we believe, that they have learned to use interpersonal behavior which

wins acceptance for themselves as well as for their ideas. If we may assume that their low intelligence made it likely that their contributions in the problem-solving discussions were not as high in quality as those offered by more intelligent youngsters, it appears that they won approval of their proposals because of the quality of their behavior and not because of the inherent value of the suggestions they made.

It is interesting in this connection that teachers perceived the children with greater power, among the intelligent ones, as not dependant on others in their behavior, whereas they viewed those with high power (among less intelligent children) as making many more attempts to influence. Here again an aloofness is noted in the actions of more intelligent and influential children while a busyness is apparent in the efforts of higher powered but less bright ones.

Also note that teachers made distinctions in the characteristics they assigned to those with high power and to those with low power. In general they saw pupils with higher power as being more successful in their attempts to influence classmates. Thus, the persons designated as most powerful by the children were also seen as most influential by the teachers. Teachers in addition described children with greater power as being more friendly and interested in others. Perhaps their outgoing behavior is the reason that they were well liked by their classmates.

In summary, a child with greater power behaved differently and was perceived differently by teachers and peers from one with less power. Less intelligent children appeared to react to the possession of power more than highly intelligent ones did.

Boys and girls showed interesting differences which are worthy of consideration. Boys are discussed first.

Note that boys appear to obtain their power from being liked or from being threatening persons. Only the highly intelligent ones are accorded expertness.

The possession of high social power did not make boys any more successful in the small group discussions than the ownership of low power, among those high in intelligence. The reason that these boys were not more influential may be because of their manner in the groups. They appeared to be not strongly involved in the groups and used forceful, direct and emotionally-toned behavior. These latter aspects of their behavior were visible during the analysis of the data where the behavior of boys high in both power and intelligence were contrasted with the behavior of girls who were high in both respects. Boys high in power as well as intelligence, in short, appeared to have assumed an insistent and dominating approach to other persons which was not at all typical of the girls.

Boys low in intelligence were extremely active, and successfully so, in their groups and the more power they had the more they behaved in this manner. It is probable that less intelligent boys won favor for their ideas by engaging in frequent and sympathetic interaction with others.

There can be no doubt that teachers clearly perceived boys with greater power as being more successful as influencers and as being different from those with less power in many other ways. It is puzzling in the light of the previously described results about boys, however,

that teachers perceived boys with greater power as more successful influencers and saw them as more friendly and altruistic regardless of their intelligence. The teachers' descriptions of highly intelligent boys' behavior in the classroom were not in accord with the behavior used by these boys in the groups. The teachers' descriptions of all boys were more like the behaviors shown only by the less intelligent boys.

Several reasons may account for the discrepancy between the descriptions by teachers and the behavior observed in the groups. Teachers may have had a wider range of experiences to call to mind in making their ratings than the kind observed in the small problem-solving groups. Teachers may have had so many children to rate in one classroom that their ratings were not accurate. Teachers may have preferred those seen as more or less powerful and thus distorted their ratings without realizing that they were doing so. Finally, the active efforts of the less intelligent boys may have been so visible that they were taken by teachers as characteristics of all boys, even those with high intelligence. This latter seems to be the most likely explanation since teachers made absolutely no distinctions in their ratings of boys with different degrees of intelligence when their social power was controlled.

Turning now to a consideration of the girls, it is notable that those with more power were seen by their classmates as better liked and were accorded more expertness than those with less power. It seems reasonable that girls should have been seen as experts when

they were influential whereas boys were more often viewed as threatening. Boys with higher power, we have already seen, were considerably more likely to be forceful and threatening in their behavior.

The girls with more power were more successful than those with less power during the small group sessions, but this was true only among those low in intelligence. The possession of high or low power was not associated with the degree of success among more intelligent girls.

Finally, teachers perceived girls with more power as more successful regardless of their intelligence and viewed their behavior in the classroom as being quite similar to that noted in the observed behavior in the small groups.

The evidence makes it clear that the members of both sexes who were identified by classmates as having the greatest social power had quite different social relations from those who had been denoted as having the least power.

Intelligence

What evidence is there that persons were different in their social relations when they differed in intelligence? The answer, in so far as data from this study are concerned, is that there is little evidence. Highly intelligent persons on the whole were very seldom different as social beings from the less intelligent ones when their degree of social power was held constant.

Children in both sexes were seen by their classmates as more expert in schoolwork when they were more intelligent. In addition, highly intelligent girls were well-liked in contrast to less intelligent girls, but this was not true for boys. Apparently higher

intelligence is no great help to a boy in his social relationships but makes for smoother social interactions for girls.

Recall, however, that more intelligent boys were observed to be more active in their groups, more successful in influencing others, and more supportive of others, among those low in social power but not among those high in power. Perhaps their social graces were not becoming to boys since it is evident that they did not make them better liked by peers, assuming that social behavior in the small groups was typical of their behavior in the classroom. Yet, they were successful in winning acceptance for their ideas in the discussion groups. This appears to be an instance in which highly intelligent boys used behavior in the groups which was quite different from that which they might ordinarily use, thus they were heard and accepted. Low power for an intelligent boy appears to generate smoother and more outgoing social relations for him than does high power.

Teachers discriminated between more intelligent and less intelligent children only when describing girls. We have already noted that they made no distinctions in rating boys who had different degrees of intelligence. They perceived girls with more intelligence as making more attempts to influence others and as being successful in doing so. Again teachers' descriptions of girls were similar in general to the behaviors girls were observed to employ in the groups.

Conclusions

1. There is little support in these data for the assumption that intelligent children behave differently in social situations from less intelligent ones when the degree of their social power is held constant. Intelligence by itself is not an important determinant of social relations.

2. More intelligent children (sexes combined) behaved about the same whether they were high in power or low in power. An intelligent child with low social power does not appear to act in ways which may cause strain in his social relations. A boy high in intelligence and high in power clearly behaves in a manner that might create strong stress in his social relationships.

3. Less intelligent children behave differently according to the power they possess. Those with more power, and especially boys, reveal behavior which is indicative of sympathetic, understanding and vigorous social interaction. Those with little power and intelligence tend to be withdrawn and passive.

4. Children who were identified by their peers as having the most social power were found in general to be most successful in convincing others in a face-to-face discussion group and were described by teachers as most successful in influencing regular activities in the classroom. Thus, children designated as having more power did in fact reveal greater influence.

5. Variations in the power or intelligence of second-grade children were related to the various indicators of social relations in ways which were not different from those shown by fifth-grade children.

6. The power of these children appears to be based on their attractiveness and expertness more than on their ability to threaten others.

7. The amount of a child's power was more of a determinant for a boy's social relations than for a girl's.